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reaction medium to precipitate carbonates or silicates of the mineral filler onto the fibers.

- -- 17. (New) Method as claimed in claim 16, wherein the aqueous suspension of cellulose fibers includes sodium hydrogen carbonates.
- -- 18. (New) Method as claimed in claim 17, wherein the aqueous suspension of cellulose fibers includes calcium-and/or magnesium-hydrogen carbonates.
- -- 19. (New) Method as claimed in either claim 17 or 18, wherein a total alkalimetric titer of the aqueous suspension is between 2 and 30°F.
- -- 20. (New) Method as claimed in claim 17 wherein the aqueous suspension comprises between 20 and 1,000 ppm of sodium ions (Na⁺).
- -- 21. (New) Method as claimed in claim 18, wherein the aqueous suspension contains between 5 and 200 ppm calcium ions (Ca^{2+}) and/or between 5 and 200 ppm magnesium ions (Mg^{2+}).
- -- 22. (New) Method as claimed in claim 16, wherein the hydroxide of the mineral filler is a calcium hydroxide.
- -- 23. (New) Method as claimed in claim 22, wherein the calcium hydroxide is added in as a concentrated milk or in soluble form.
- -- 24. (New) Method as claimed in claim 23, wherein said milk comprises calcium hydroxide particles having a mean diameter of less than 6 microns.



- -- 25. (New) Method as claimed in claim 16, wherein following precipitation of the carbonates or silicates of the mineral filler onto the fibers, a gas-containing carbon dioxide is injected into the aqueous solution to neutralize and stabilize the pH of the aqueous suspension.
- -- 26. (New) Method as claimed in claim 16, wherein the aqueous suspension derived from the papermaking procedure is based on a bleached or unbleached chemical pulp of paper fibers, on a mechanical pulp, or on a thermomechanical pulp, or on a mixture thereof.
- -- 27. (New) A manufacturing process for sheets of paper comprising
- (a) providing a manufacturing composition based on water and on a bleached or unbleached chemical pulp of paper fibers, on a mechanical pulp, or on a thermomechanical pulp, or on a mixture thereof, said composition comprising at least alkali metal and/or earth alkali metal ions, and silicate or carbonate and hydrogen carbonate ions,
- (b) adding to said composition a hydroxide of a mineral filler to affix said mineral filler onto the paper fibers, and
- (c) forming a wet sheet of paper on a papermaking machine from the paper fibers which were precipitate-loaded in suspension and drying said sheet.
- -- 28. (New) Process as claimed in claim 27, further comprising